



Our Reference: VMF-491-A

PATENT

THIRD SUBSTITUTE SPECIFICATION

**ELECTRIC MOTOR UNIT, IN PARTICULAR FOR MOTOR VEHICLE,
INCORPORATING CONTROL ELECTRONICS**BACKGROUND

[0001] This invention relates to an electric motor unit and an electronic control of the motor.

[0002] The electric motor unit proposed by the invention can be advantageously used in a motorized fan used for the heater and/or vent and/or air conditioner of a motor vehicle.

[0003] Historically, the stator of such a motor unit comprises a carbon holder plate (PPC) which includes a brass insert and a radiator.

[0004] The brass insert serves to guide the carbon holders and to bring the current closer to the foot of the MOSFET of the power circuit near the radiator.

[0005] The radiator, generally made of aluminum, provides cooling to the power components (diodes, MOSFET transistors) and provides a space into which several electronic components on a circuit board that has been imprinted with the control electronics are received and held.

[0006] A motor unit of this type was described in the French patent application that the Assignee filed under number 98 03 128.

[0007] One aspect of the invention is that a motor unit structure provides for very high mounting tolerances between the radiator and the brass insert.

[0008] In another aspect of the invention, the rigidity and the watertightness of a motor unit structure has been improved.

[0009] It is a further aspect of the invention to provide a motor unit structure of which the means for connecting and the assembly of the components are simplified.

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